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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/736,896	10/25/1996	CHRISTOPHER G.M. KEN	290252016600	4538

7590 06/10/2003

BINGHAM, MCCUTCHEN
THREE EMBARCADERO, SUITE 1800
SAN FRANCISCO, CA 94111-4067

EXAMINER	
BUI, VY Q	

ART UNIT	PAPER NUMBER
3731	47

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

N.K

Office Action Summary	Application No.	Applicant(s)	
	08/736,896	KEN ET AL.	
	Examiner	Art Unit	
	Vy Q. Bui	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4 and 6-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4 and 6-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Specification

The amendment filed March 17, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: new range "between about 0.2 mm and about 30mm" (claim 13, line 6) introduce new subject matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3-4, 6-10, 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over DIBIE et al (5,531,788).

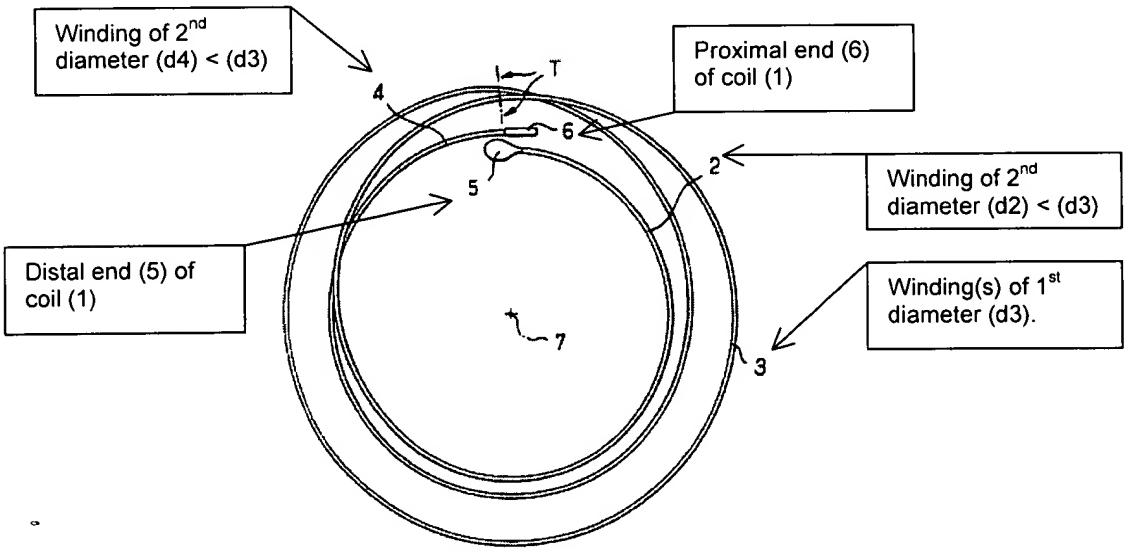

FIG. 2

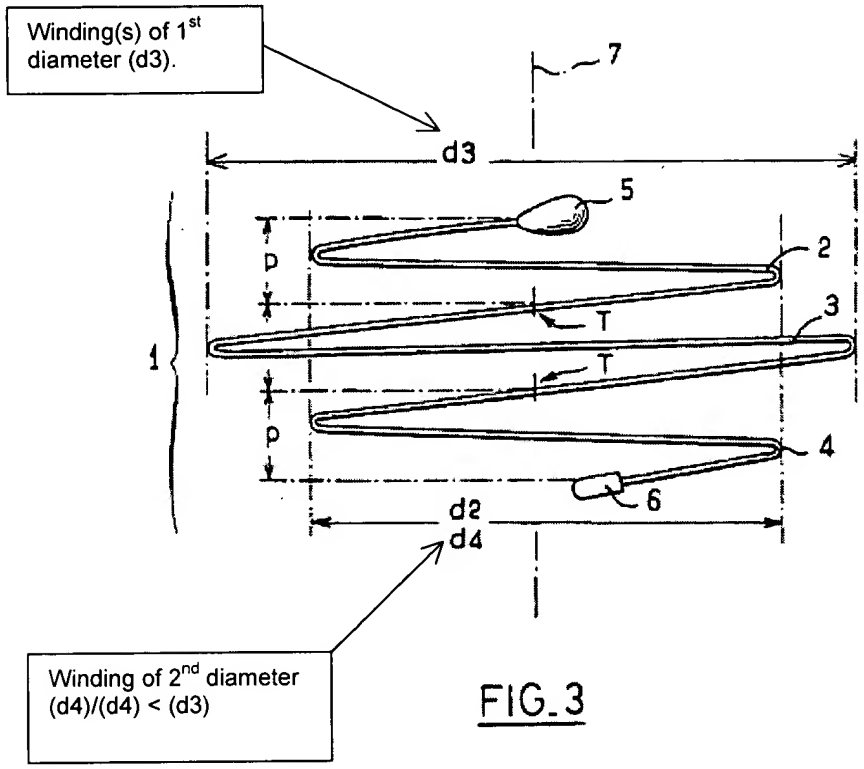

FIG. 3

As to claims 1, 3-4, 6-10, and 12-15 DIBIE (Figs. 1-3, 5-6 and 9; column 8, lines 25-28) discloses a flexible helical coil (1) for use with a wire/cable (19). The coil has a distal end (5) and a proximal end/a second coupling member (6) detachably coupled/interlocked to the distal end/the 1st coupling member (18) of wire/cable (19) (Fig. 9). The coil comprises one winding (3) (shown in Figs. 2-3) or a multiplicity of windings (3) (not shown, but DIBIE discloses in column 8, lines 25-28 that the device can have a number of windings of more or less than three windings) of a 1st diameter (d3) immediately adjacent of the distal end (5) and the proximal end (6) of the coil. The coil further is wound into a 2nd diameter (d2)/(d4) smaller than the 1st diameter (d3) of about 27mm (column 7, lines 14-15 and Fig. 3), whereby the proximal end (6)/the 1st coupling member and the distal end (5) of the coil are positioned radially inwardly of the immediately adjacent 1st diameter (d3) as shown in Fig. 2.

Alternatively, DIBIE does not explicitly show a multiplicity of windings (3) of the 1st diameter (d3) in the drawings, however, according to the disclosure (column 8, lines 25-28), it would have been obvious to one of ordinary skill in the art to have a multiplicity of windings (3) such as two or three windings (3) as this configuration would be well within the scope of DIBIE's invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6,11, 13 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over WALLACE et al-5,649,949.

WALLACE (Fig. 4) shows a soft flexible helical vaso-occlusive coil 120 with substantial all structural limitation as recited in the claims, including windings 126 of first diameter, winding 124 of second diameter smaller than the first diameter at the proximal end of coil 120, whereby the proximal end of coil 120 is positioned radially inwardly of the first diameter. WALLACE does not disclose fibers attached to promote embolization as recited in claims 11 and 16. However, as admitted by the applicants (page 4, lines 14-19), attaching fibers to promote embolization is well known in the art and therefore, it would obvious to one of ordinary skill in the art at the time the invention was made to attach fibers to coil 120 to promote embolization as taught by well known references such as those mentioned in the specification (page 4, lines 14-19). Notice

that the proximal end of coil 120 would form a bend adapted to couple to a distal end of a wire.

Response to Amendment

The amendment filed on March 17 (paper number 46), 2003 under 37 CFR 1.131 has been considered but is ineffective to overcome the prior art of reference.

The applicants assert that:

First, the reference does not teach or suggest a helical coil that is wound into a multiplicity of windings as claimed and other features which are disclosed in the specification of the present invention (see amendment paper number 46, page 4, first paragraph).

Second, the coil in the present invention is soft and flexible. Therefore, the coil in the present invention is different from the coil disclosed in DIBIE et al-5,531,788, which is stiff.

Third, it is not obvious to modify DIBIE et al-5,531,788 coil to have the coil as claimed in the present invention because the difference in the intended uses of the two coils.

The below is the response to the applicants' arguments:

First, there is no language in the claims to specify the present invention as argued in amendment paper number 46, page 4, first paragraph.

Second, the terms "soft", "flexible" and "stiff" are relative terms. The term "soft" and "flexible" in the claims of the present invention do not ~~defined by the claim~~ clearly define the present invention, the

specification does not provide a measurable standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Therefore, one of ordinary skill in the art could not be able to define the present invention over the coil of the prior art of reference such as DIBIE et al-5,531,788.

Third, as disclosed by DIBIE et al-5,531,788 (column 8, lines 25-28), more than one windings 3 can be provided to construct a DIEBIE coil to have all structural limitations as recited in the present invention. Even though the intended uses of DIBIE coil and the coil of the present invention are different, structurally, DIBIE coil and the coil of the present invention as claimed are not structurally different.

Conclusion

Applicant's amendment did not clearly define the present invention over the prior art of reference and necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 703-306-3420. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano can be reached on 703-308-2496. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-2708 for regular communications and 703-308-2708 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

VQB VB
June 6, 2003.

MICHAEL J. MILANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700